

MEMORANDUM

THE WHITE HOUSE

February 11, 1969

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WASHINGTON

copy sent Ellsworth, as attachment to top memo
MEMORANDUM FOR THE PRESIDENT

FROM: Henry A. Kissinger

SUBJECT: Cape Keraudren Nuclear Excavation Project in Australia
and the Limited Test Ban Treaty

In response to your earlier request, Dr. DuBridge and I have prepared for your consideration the attached Issues Paper (Tab A) on the relationship of the proposed Cape Keraudren nuclear excavation project to the Limited Test Ban Treaty (LTBT) and the various options by which we might proceed with the project. I think that it is clear from the attached paper that this is a very complex issue that will have to be dealt with carefully to avoid serious complications.

While it will not be possible to make a final judgment on the magnitude of this problem until the joint US-Australia technical feasibility study has been completed, I think that we should develop a better understanding of the options available to us as soon as possible. In view of the Senate's interest in this problem, the Administration will probably have to lay the groundwork for its approach to the problem very soon. In this connection, Senator Fulbright has sent the attached letter (Tab B) to Secretary Rogers requesting a formal Administration statement on whether or not the SCHOONER event, a nuclear excavation shot in Nevada last December, violated the provisions of the LTBT. The answer to Senator Fulbright's question will present problems since the amount of radioactive debris that left US territorial limits was considerably in excess of the maximum that had been predicted.

I therefore recommend that you direct that a formal study be prepared on the relationship of the Cape Keraudren project to the LTBT and the options by which we might proceed with the Australian project. If you approve, I will sign the attached NSSM (Tab C) setting up an ad hoc NSC group under the Secretary of State with appropriate representatives of other agencies, including the AEC, to prepare the study for NSC consideration.

Attachments:

Tab A - PLOWSHARE Issues Paper dtd 2/11/69
Tab B - Cy ltr Senator Fulbright to SecState
Tab C - NSSM

Approve _____
Disapprove _____
Other _____

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PA/HO Department of State
E.O. 12958, as amended
August 6, 2007

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ISSUES PAPERCAPE KERAUDREN NUCLEAR EXCAVATION PROJECT
and the
LIMITED TEST BAN TREATY

We have now agreed to a joint technical feasibility study with the Australians on the nuclear excavation of a harbor at Cape Keraudren on the northwestern coast of Western Australia. The issue must now be examined as to the relationship of this project to the provisions of the Limited Test Ban Treaty (LTBT) (copy attached). Consideration should then be given to the relative merits of the various options under which we might carry out the project.

The following questions should be answered in developing the U. S. position on this project in the light of the provisions of the LTBT.

1. Would the Cape Keraudren nuclear excavation project in Australia constitute a violation of the Limited Test Ban Treaty?
2. Would a unilateral U. S. interpretation of the LTBT to permit the Cape Keraudren project provide an acceptable basis for the project?
3. Would an agreed bilateral (or trilateral) US-USSR-(UK) interpretation of the LTBT to permit the Cape Keraudren project provide an acceptable basis for the project?
4. Would an effort to amend the LTBT to permit nuclear excavation activities such as the Cape Keraudren project be in the over-all U. S. interests at this time?

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The pros and cons on each of these questions can be summarized along the following lines:

1. Would the Cape Keraudren nuclear excavation project in Australia constitute a violation of the Limited Test Ban Treaty?

a. Pro:

(1) The LTBT prohibits any nuclear explosion "(a) in the atmosphere; beyond its limits, including outer space; or underwater, including territorial waters or high seas; or (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted." The Cape Keraudren project, which will involve underwater excavation will inject radioactive debris into both the atmosphere and the ocean. Since the proposed harbor is on the coast of Australia, it will be extremely difficult to find weather conditions that will assure that debris vented to the atmosphere will not go past the three-mile territorial limits. In addition, the fact that the excavation will take place underwater might be construed to constitute a separate violation of the provisions of the treaty against underwater tests even in territorial waters. In any event, even if it is argued that this underwater test is in fact underground, there appears to be little possibility that the radioactivity injected into the water could be prevented from going beyond the territorial waters of Australia which would also be a violation of the treaty.

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(2) Although both we and the Soviets have conducted a number of tests that clearly put radioactive debris beyond our respective territories, neither the Soviet Union, nor any other signatory, has accepted a de minimis or any other interpretation of the meaning of the treaty language. In fact, on January 21, 1969, the Soviet Union informed us privately that they had detected debris from the SCHOONER nuclear excavation event in Nevada and that they considered this to be a violation of the LTBT.

(3) The fact that the project will be subject to close public scrutiny, as a consequence of its international nature and strong Congressional interest, will make it impossible to obscure the treaty implications and therefore will establish any violation as a premeditated act.

b. Con:

(1) The treaty does not define "radioactive debris" nor establish quantitatively how much must be present outside the territorial limits in order to constitute a violation. The language clearly was not intended to cover the presence of a single radioactive atom. This is, therefore, clearly a case where a de minimis interpretation is required to make the treaty operationally meaningful. In these circumstances, a reasonable interpretation could vary anywhere from the level of detectability to the normal international safety standards. By carefully choosing the site and meteorological conditions, it should be possible to design this test so that levels of radioactivity outside of Australian

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territorial waters, both in the atmosphere and in the ocean, would be kept within normal safety standards.

(2) There is, in fact, an implicit international acceptance of a de minimis interpretation of the treaty. Our nuclear excavation program to date has been conducted on this basis since we knew that some of the tests would put radioactivity outside our boundaries and that there was a reasonable probability that they would be detected in Canada and possibly elsewhere. The Soviets have also conducted nuclear excavation and other underground tests in a manner in which they obviously knew that some radioactivity would go beyond their territory, and we detected these tests in a number of instances. In these circumstances, it is significant that neither country has chosen to protest publicly that these tests have violated the LTBT, nor has any other country chosen to charge formally that these tests have violated the treaty.

(3) The location of the Australian event makes it very unlikely that the debris would be detected by any other country and makes it extremely unlikely that detectable amounts would enter into the territory of other countries. Moreover, there is no possibility that amounts approaching international safety standards will enter the territory of other countries. There would, therefore, almost certainly not be an injured party to claim a treaty violation.

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2. Would a unilateral U. S. interpretation of the LTBT to permit the Cape Keraudren project provide an acceptable basis for the project?

a. Pro:

(1) A unilateral U. S. interpretation of the LTBT would provide an adequate basis for the conduct of this test since there is strong worldwide support, including the Soviet Union, for such peaceful applications of nuclear explosives. Other countries, which in general see potential benefits from nuclear excavation, would welcome our getting on with the job.

(2) The public would in fact be reassured by a U. S. interpretation that kept debris levels outside of national territories below internationally accepted safety levels.

b. Con:

(1) This would present the Soviet Union, and others, with a unilateral U. S. reinterpretation of a formal multilateral treaty and would thereby force them to challenge the position even if they had some sympathy with the objective.

(2) There would be substantial foreign and domestic public criticism that the U. S. was attempting to undercut the LTBT and contaminate the atmosphere.

(3) This could have a major long-term effect in undercutting confidence in international treaties by creating the impression that they could be unilaterally interpreted by individual major powers to suit their immediate purposes.

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(4) This action might even start a chain reaction of treaty interpretations by other countries that could have the effect of destroying the LTBT.

3. Would an agreed bilateral (or trilateral) US-USSR-(UK) interpretation of the LTBT to permit the Cape Keraudren project provide an acceptable basis for the project?

a. Pro:

(1) This procedure would be generally acceptable internationally for the reasons given in 2a(1)&(2) above.

(2) There would be additional support for this procedure among nations and individuals that would look with favor on a joint US-USSR-(UK) undertaking in an activity involving the extension of the peaceful uses of the atom on a worldwide basis.

b. Con:

(1) Some countries would deeply resent this as a dictate by the nuclear powers to arbitrarily reinterpret the LTBT for their own purposes.

(2) Although possibly somewhat muted by the joint US-USSR-(UK) character of the interpretation, there would still be considerable public disapproval on the grounds that this would undercut the LTBT.

(3) This could also have a long-term effect in undercutting confidence in international treaties by indicating that the key nuclear powers could arbitrarily reinterpret the treaties to suit their immediate purposes.

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4. Would an effort to amend the LTBT to permit nuclear excavation activities such as the Cape Keraudren project be in the over-all U. S. interests at this time?

a. Pro:

(1) An amendment to the LTBT would give us a clear-cut legal basis to go forward with nuclear excavation projects and would avoid any possibility that we would be charged with violations of the treaty.

(2) An amendment would in any case almost certainly have to be made before we could undertake really large-scale projects such as the sea-level Atlantic-Pacific canal or projects less favorably located geographically.

b. Con:

(1) It is extremely unlikely that an amendment to the LTBT could be brought into force on a time-scale consistent with the Cape Keraudren project. The form of the amendment will probably in practice prove to be quite complex, both with regard to the establishment of levels of radioactivity and with the definition of inspection procedures to insure that venting tests are in fact intended for peaceful purposes. Moreover, the formal procedures for amending the treaty would undoubtedly prove quite time-consuming since the treaty provides that amendments must be considered at a conference called for by at least one-third of the parties to the treaty and that the amendments would only enter

...ce if ratified by a majority of the parties, including the US,
USSR, and the UK.

(2) An amendment would weaken the force of the LTBT, an agreement to prevent contamination of the atmosphere.

(3) It is not certain that the Senate would in fact ratify an amendment. In addition to concern about endorsing increased radioactivity in the atmosphere, questions may well be raised concerning the security implications of the amendment. Specifically, if the procedures do not include inspection in the Soviet Union, which seems unlikely, the charge will be made that special weapons effects tests could be conducted by the Soviets in the atmosphere under the provisions of the amendment.

(4) An effort to reopen the LTBT for amendment will result in counter proposals from other countries to amend the LTBT to make it a Comprehensive Test Ban Treaty with or without provisions for PLOWSHARE activities.

Attachment:
Limited Test Ban Treaty

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United States Senate

COMMITTEE ON FOREIGN RELATIONS
WASHINGTON, D.C. 20510

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January 22, 1969

The Honorable
William P. Rogers
Secretary of State
Washington, D.C.

Dear Mr. Secretary:

Over the past few years the United States has conducted a number of Plowshare cratering experiments. These tests have increased in frequency and size. The test in January of 1968, for example, was somewhat less than the equivalent of 3,000 tons of TNT, while the most recent December 1968 test was equivalent to 35,000 tons of TNT. It is the pattern of these tests and the implications of this pattern for the United States responsibilities under the Nuclear Test Ban Treaty of 1963 that concern me.

According to press reports, the cratering experiment in December of 1968 may have resulted in a violation of the 1963 Test Ban agreement. A few days after this experiment reports indicate that radiation levels in Canada rose from 10 to 20 times what they are normally. I understand from the press that the United States is investigating these reports.

Inasmuch as this Committee approved the Test Ban Treaty with its restricting provisions, I would appreciate a complete report from the Department of State on what actually happened as a result of the December experiment. My primary concern at this time is not with the question of whether the radioactive debris that may have gone into Canada was of a dangerous level of radiation. Nor do I find the question of whether Canada has officially noted any violation of the treaty that may have occurred as particularly relevant to my interest. What concerns me is the integrity of United States adherence to Article I (b) of the Nuclear Test Ban Treaty. That article explicitly bans any nuclear

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explosion which "causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted." There is no exception to this provision. Adherence to, or violation of, this article is not modified by the circumstances of the experiment, the radiation level outside the United States as a result of an incident, or whether or not the incident is officially noticed by the country where the radioactive debris lands.

On behalf of the Committee I would appreciate it if you would provide us with a full report on the alleged radioactive fallout over Canada and its relationship to the December 1968 cratering experiment. In particular, I should like to have a clear and unequivocal statement from the Department of State whether the United States, for whatever reason, violated the provisions of the Nuclear Test Ban Treaty.

It would be very helpful if the Committee could have this information at the earliest possible date.

Sincerely yours,


J. W. Fulbright
Chairman